

### NTSB National Transportation Safety Board

Office of Marine Safety

# Meteorology

Gregory D. Salottolo

#### Introduction

- Doppler weather radar images from Sterling, VA (LWX), 1502 EST to 1620 EST
- Weather conditions at time and location of accident
- National Weather Service (NWS) products
- Identified Issues
- NWS Service assessment Report
- Summary

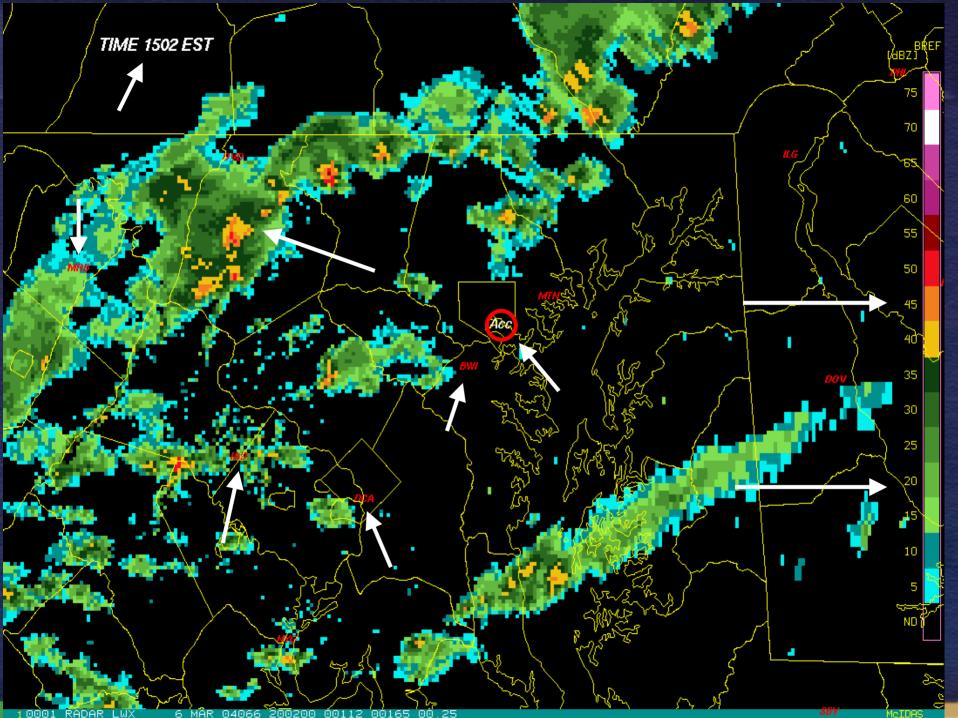


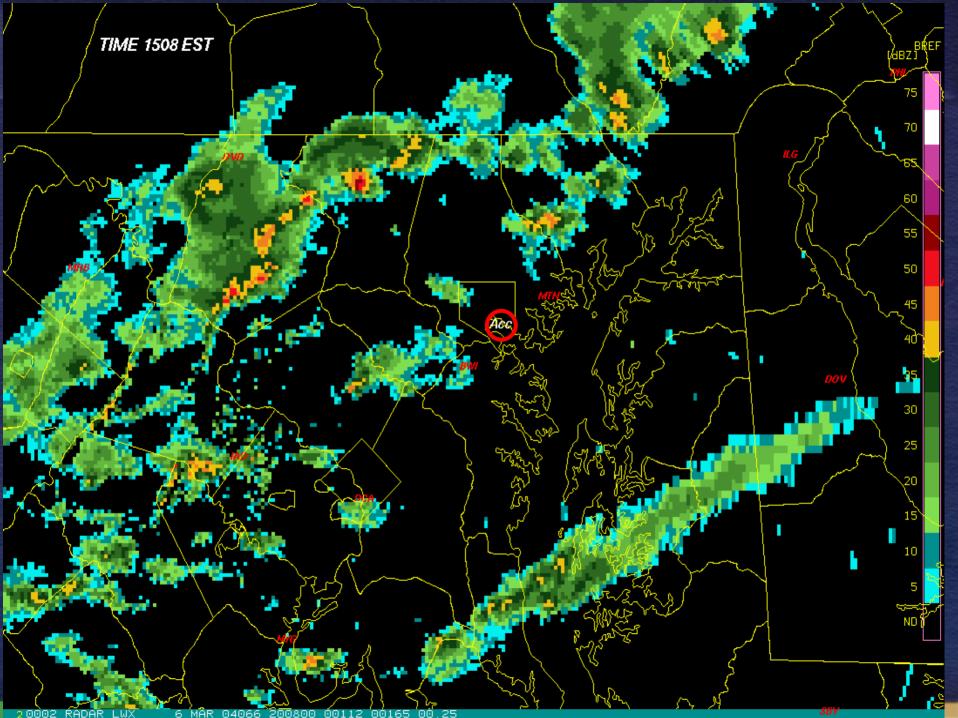
## LWX Weather Radar Images

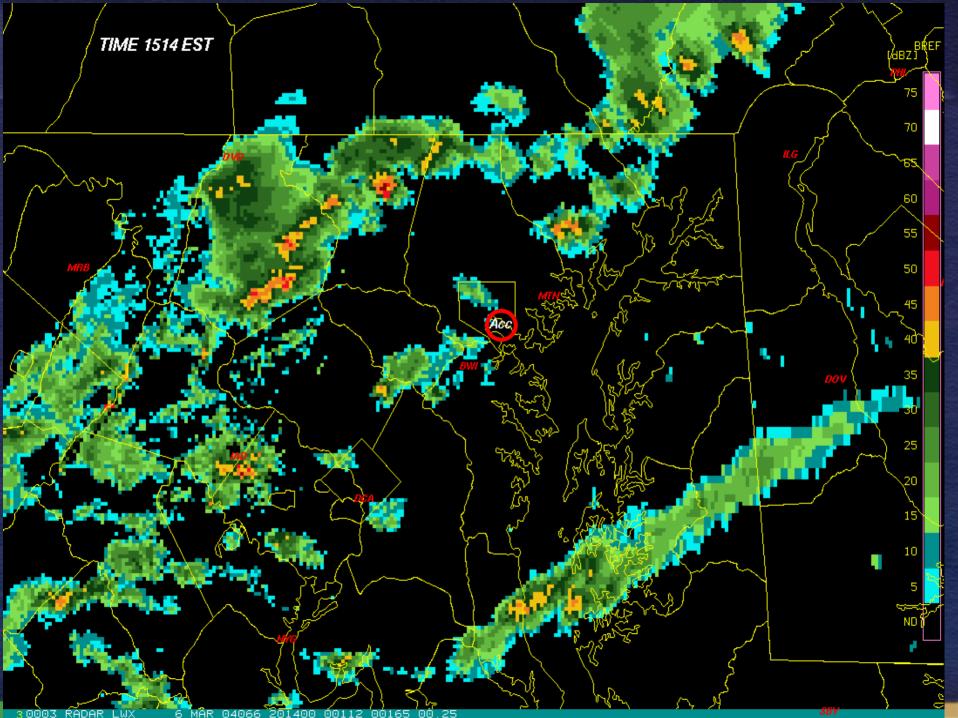
Times 1502 EST – 1620 EST

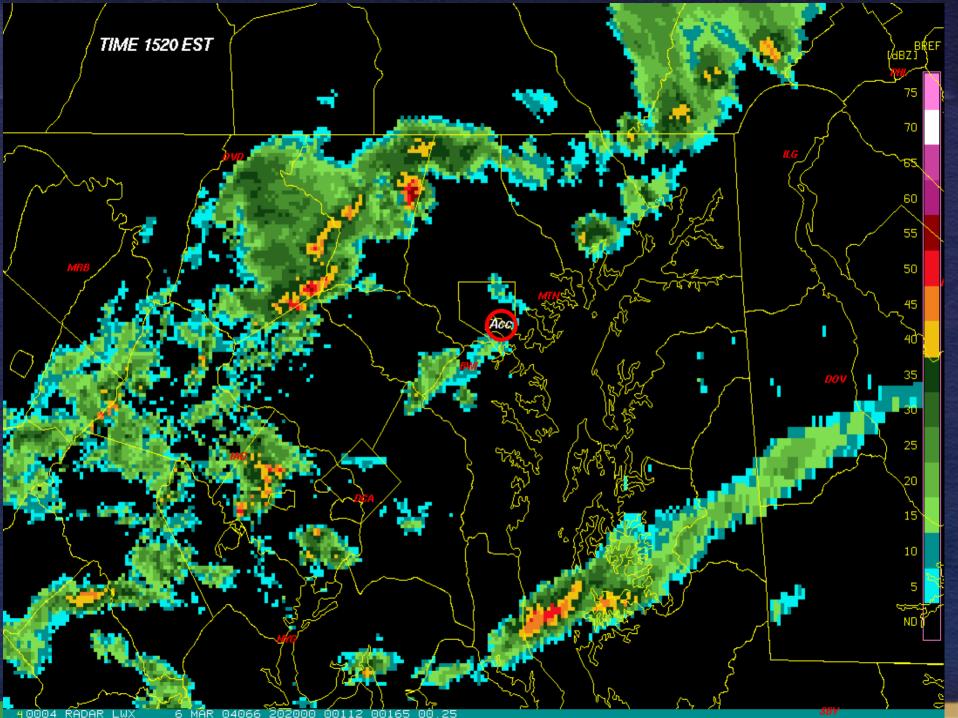
Images produced using McIDAS

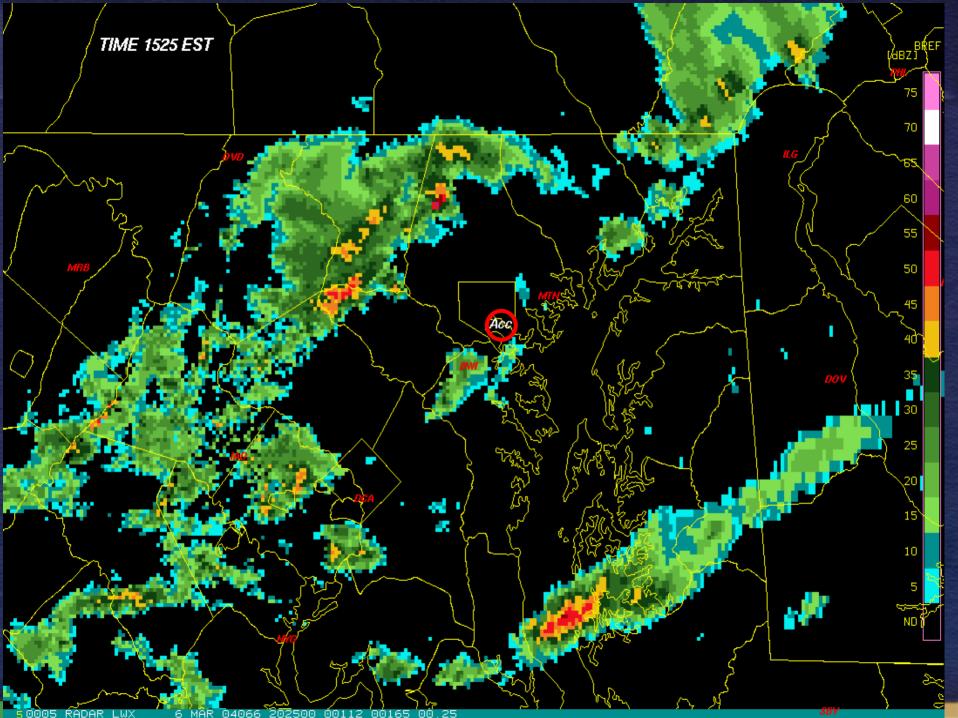


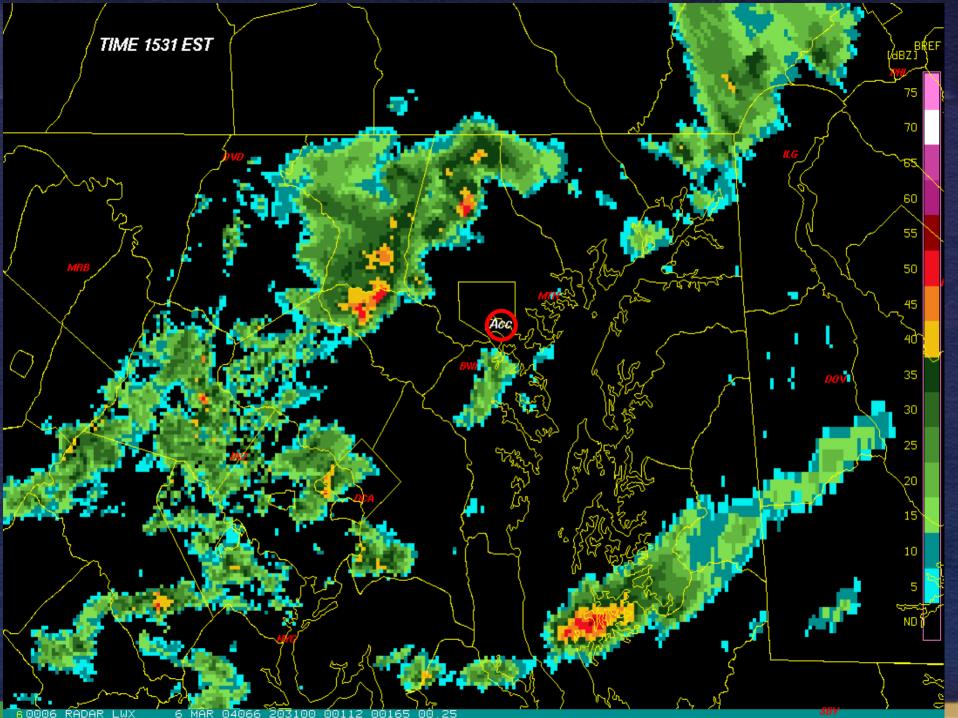


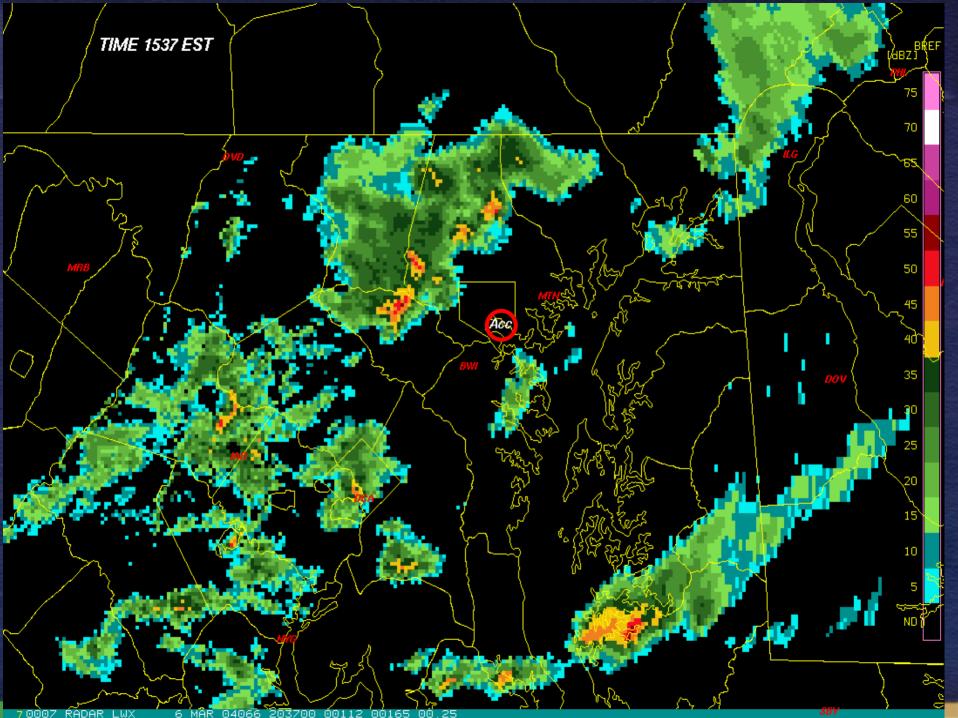


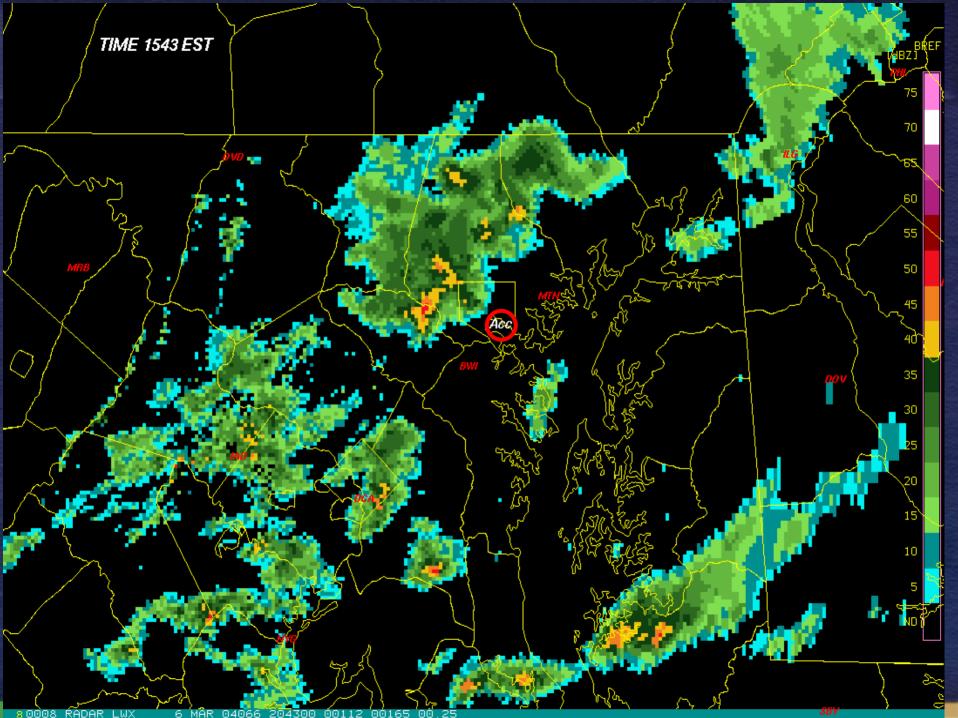


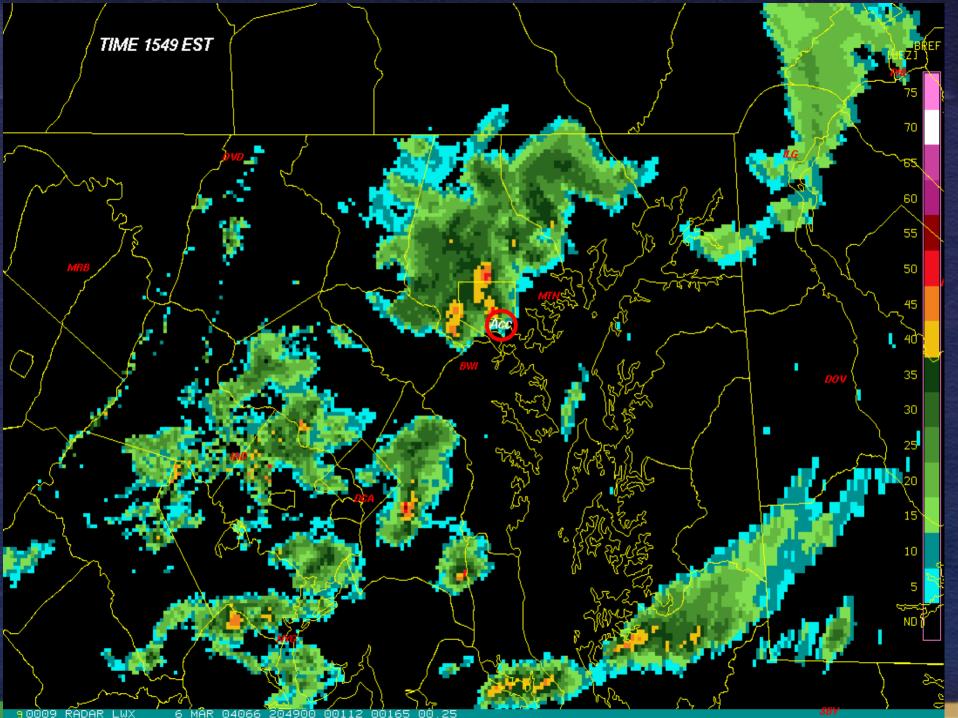


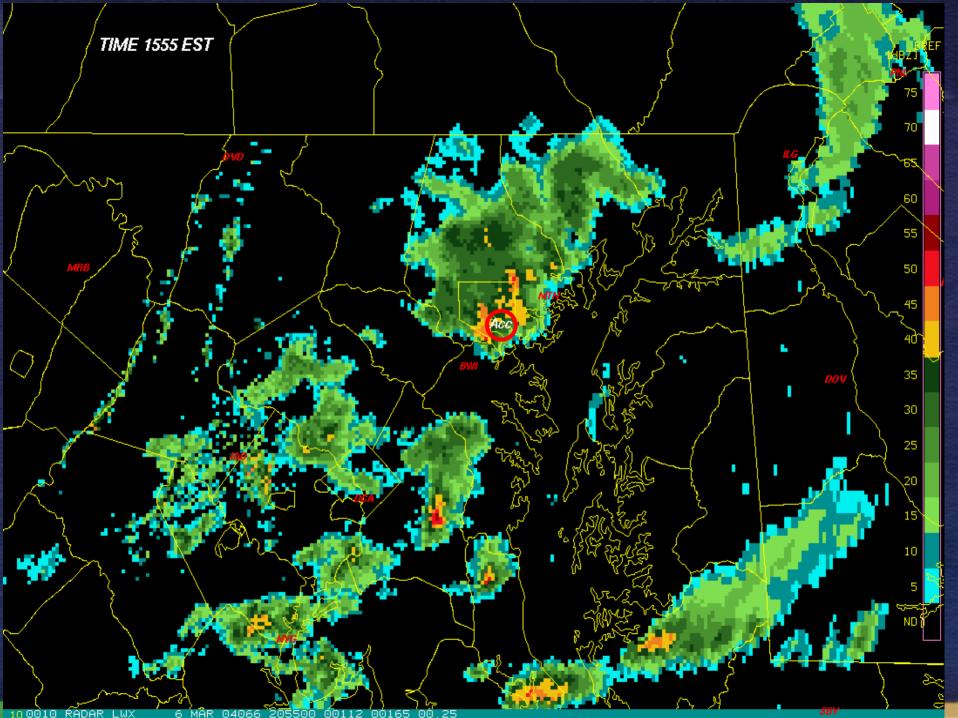


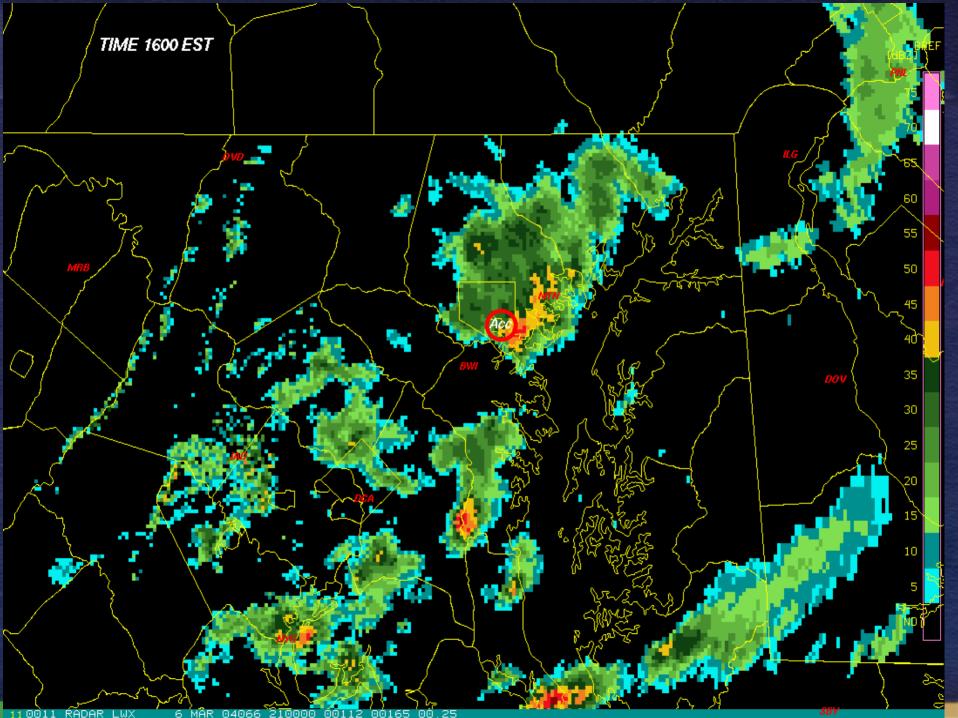


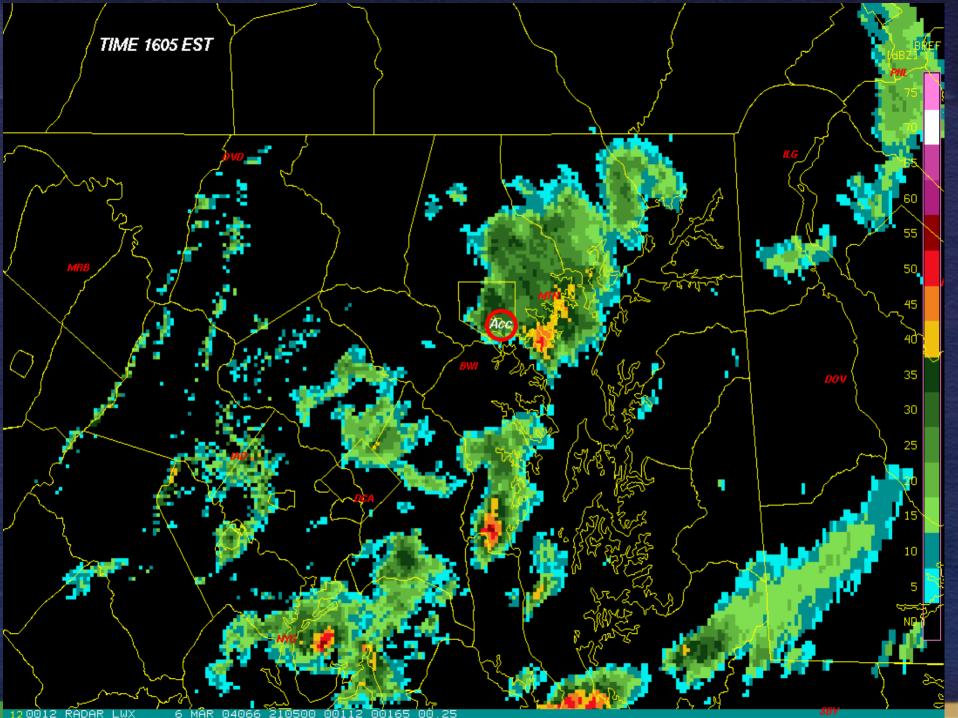


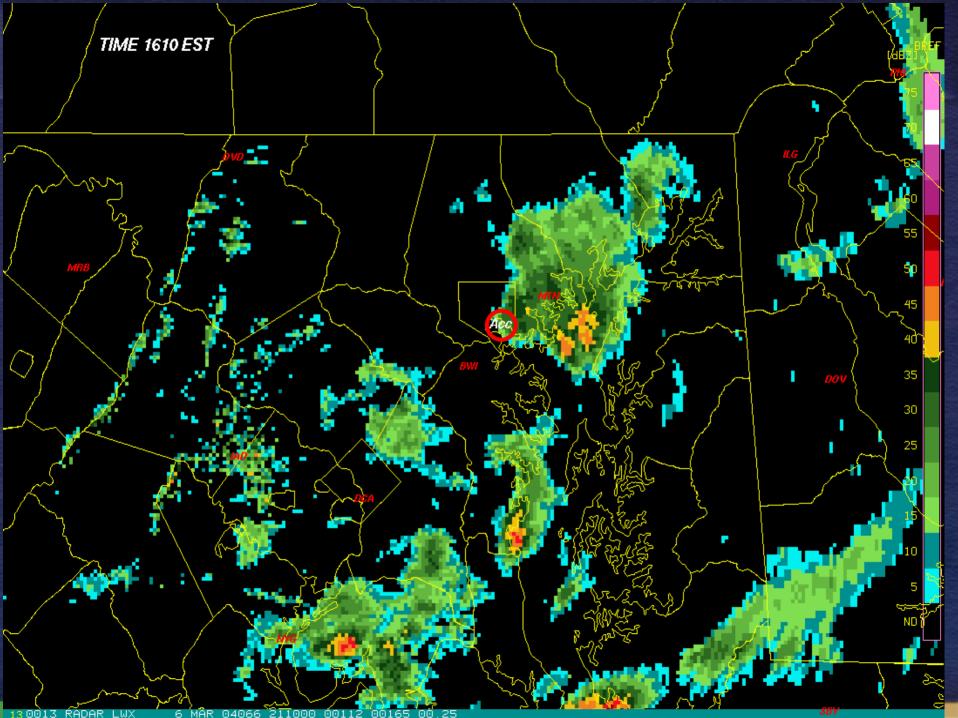


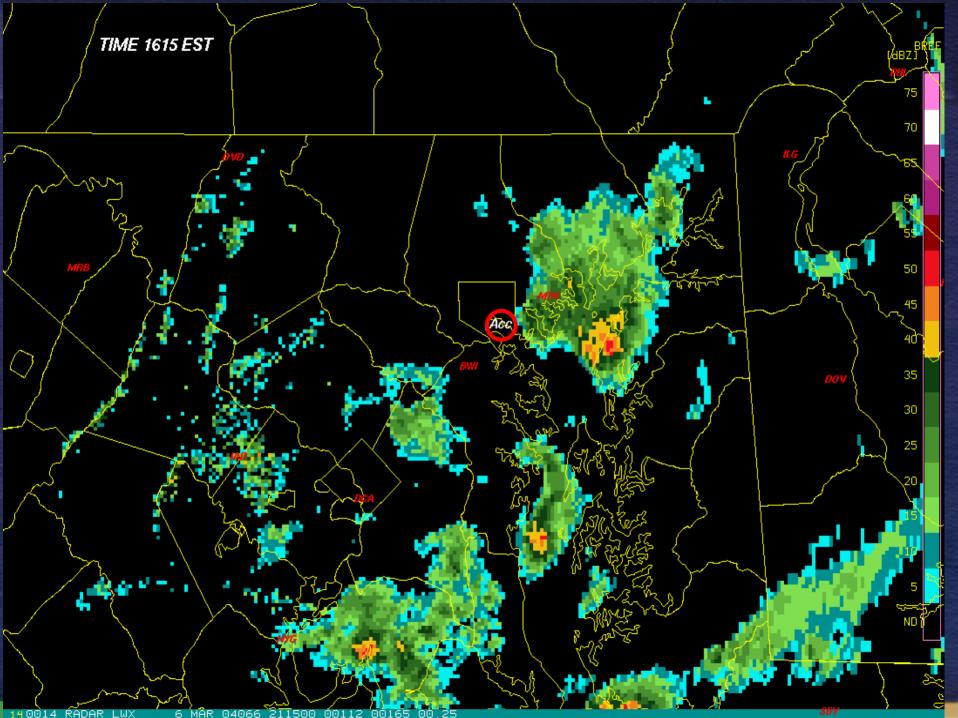


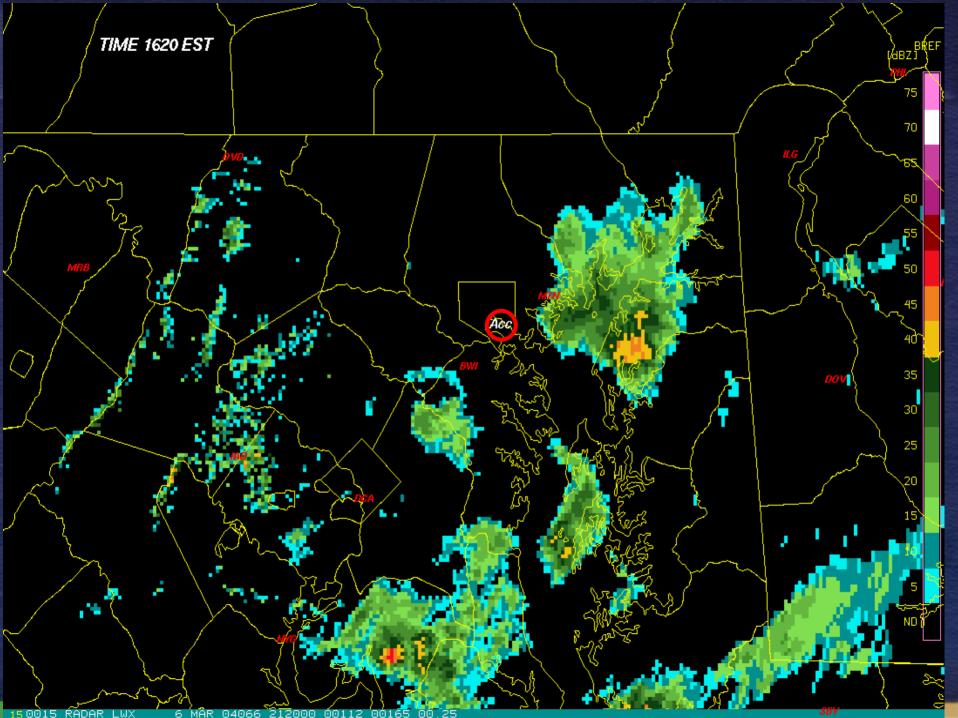












#### **Weather Conditions**

 Thunderstorms, rain showers, strong gusty winds

- Westerly winds gusting to 37 knots
  - Average sustained winds near 20 knots

 Maximum wind gusts near 41 knots at 1600 EST



### **NWS Products**

Small Craft Advisory in effect

Special Marine Warning (SMW) was issued at 1605 EST



#### **Issues Identified**

 Thunderstorms and strong gusty wind conditions could have been identified as early as 1500 EST

 Terminal Doppler Weather Radar (TDWR) data and surface weather operation data not fully used or integrated



#### **NWS Service Assessment**

- Following the Lady D accident the NWS initiated a review of their performance
- The report contained 11 recommendations in response to identified issues
- No further recommendations needed
- 7 of 11 recommendations currently being implemented



### Summary

- Thunderstorms with strong gusty winds and rain showers moved through the accident area
- A SMW should have been issued at least 20 minutes prior to the accident
- Recommendations in the NWS Service Assessment report were responsive to the issues identified by staff



NTSB